REMARKS

Claims 1-11 are submitted for reconsideration without amendment in the light of the following remarks and authorities.

1. The courtesy of the Examiner in withdrawing the rejection of claims on Kowaki is acknowledged with appreciation.

2. The requirement for new corrected drawings is noted. We enclose new corrected drawings.

3. The courtesy of the Examiner in considering the information disclosure statement submitted on January 7, 2005, is acknowledged with appreciation.

The office action states:

> Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatley et al (USPN 5113447) in view of Greenberger (USPN 5870484). "Hatley et al" will be referred to as "Hatley". Hatley discloses a system for optimizing audio imaging in an automotive listening environment.
>
> Regarding Claim 1, Hatley teaches:
>
> An audio system (200) for a vehicle (172) (col. 5, lines 35-60; Figure 2), said vehicle comprising a first passenger location (space for passengers, such as driver in Figure 2; col 5, lines 61-66)
>
> and said audio system comprising:
>
> a first directional audio channel (left channel, L, or alternatively, center channel, C) signal source (Lip input port or output of 102 for summed signal; Figures IA and 1B; col. 3, lines 46-66; col. 4, lines 14-43);
>
> a surround audio channel signal source (side channel difference signal or ambience signal, output of 152, Figure 1B; col. 4, lines 44-63);
>
> a first electroacoustical transducer (168) coupled to said first directional audio signal source (L or C, via 112' and 162; Figures 1B,2; col. 5, lines 3-13 and 43-51) and to said surround audio channel source (output of 152, via 154, 156, and summer 112'; col. 4, lines 44-68; col. 5, lines 1-13), situated behind said first passenger location ("rear deck", interpreted to be space adjacent to rear windshield in vehicle, such as illustrated in Greenberger, discussed below),
>
> said first electroacoustical transducer (168) constructed and arranged (connected to Lout via amplifier 162; Figure 2) to radiate sound waves corresponding to audio signals from said first directional audio channel signal source (LIN or output of 102) and corresponding to audio signals from said surround audio channel signal source (output of 152)(such signals are summed to

form Lout signal and output through amplifier (162) to speaker (168); col. 5, lines 3-13 and 43-51); and

a second electroacoustical transducer (174) coupled to said first directional audio signal source (LIN input port or output of 102, as noted above; coupled to LI via 102,104,106,108, and 164, or alternatively, coupled to sum signal, output of 102, via 104,106,108, and 164; col. 3, lines 46-66; col. 5, lines 43-51) situated forward of said first electroacoustical transducer(168)("dashboard"; col. 5, lines 53-57),

said second electroacoustical transducer constructed and arranged to radiate sound waves corresponding to audio signals from said first directional audio channel signal source (connected to C0,,t, via amplifier 164; col. 5, lines 43-51; Cout "corresponds" to left channel source as half of signal is provided to produce center channel signal; Co,,t "corresponds" to center channel source as output signal is weighed summation signal to be played back and perceived from a forward location).

Regarding the passengers in the vehicle, Hatley notes that vehicles may include a driver and one or more passengers (col. 2, lines 5-11). As noted above, Hatley teaches that transducers (168,170) may be located in the rear deck of the automobile (col. 5, lines 47-51). However, neither seating arrangements for "or more" passengers nor the passenger-relevant location of a rear deck are clearly detailed or illustrated by Hatley.

Accordingly, Hatley does not clearly specify:

a second passenger location, said second passenger location situated behind said first passenger location,

Greenberger teaches a loudspeaker array with particular radiation patterns, including several embodiments of such an invention that are applicable to an automobile (Figures 21a-e).

Specifically regarding Claim 1, Greenberger teaches:

An audio system for a vehicle (Figure 21e; col. 89, lines 41-44), said vehicle comprising a second passenger location ("rear seat", col. 90, lines 36-62; Figure 21e) said second passenger location situated behind said first passenger location ("rear seat" behind "front seat", by definition and as illustrated in Figure 21e; col. 90, lines 51-62 discuss both front and rear seat passengers)

In the context of an automobile, the "rear package shelf" of Greenberger is interpreted as equivalent to the "rear deck" of Hatley, located at least behind a front passenger location. It is further noted that Greenburger teaches the use of left and right channel speakers with front center and left and right rear speakers (col. 92, lines 7-37).

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to implement the audio system of Hatley into an automobile with a rear passenger seat, as is disclosed for the automobile audio system of Greenberger. The motivation behind such a modification would have

been that such an additional seating location would have provided space inside the vehicle for passengers in addition to the driver and a passenger adjacent to the driver.

Regarding Claim 2, Hatley teaches:

a first audio signal scaling device (106) coupling (via 110,112',162) said directional audio channel source (LIN or output of 102) and said first electroacoustical transducer (168) (col. 3, lines 58-68; col. 4, lines 1-9; col. 5, lines 43-51; Figures 1B,2), and a second audio signal scaling device (156) coupling (via 112', 162) said surround audio channel source (output of 152) and said first electroacoustical transducer (168) (col. 4, lines 65-68).

Regarding Claim 3, Hatley teaches:

a second directional audio channel source (C, output of 102, interpreting LIN as first audio signal source for parent claim), coupled (via 104,106,110,112',162) to said first electroacoustical transducer (168)(col. 3, lines 46-66; col. 5, lines 43-51; Figures 1B,2)

Regarding Claim 4, Hatley teaches:

said second directional audio channel source (output of 102) is a center channel source (col. 3, lines 46-62; col. 4, lines 14-29)

Regarding Claim 5, Hatley in view of Greenberger teaches:

a third electroacoustical transducer (170), situated behind said second passenger location (transducer 170 disclosed by Hatley as possibly located on rear deck of car (col. 5, lines 47-51), Greenberger illustrates rear shelf speaker placement behind rear passenger location (col. 90, lines 38-40; col. 92, lines 57-60), coupled to said surround channel source (output of 152, via 154,156, 158,114'; col. 4, lines 54-68; col. 5, lines 1-18 of Hatley),

said third electroacoustical transducer (170 of Hatley) constructed and arranged (connected via amplifier 166 of Hatley) for radiating sound waves corresponding to audio signals from said surround audio channel signal source (output of 152 of Hatley)(speaker 170 of Hatley outputs right side difference signal, which "corresponds" to output of 152 as an inverted version; col. 5, lines 13-18 and 43-51 of Hatley).

Regarding Claim 6, please refer to the above rejection of the similar limitations of Claims 1 and 3, particularly noting the movement of the audio signal along the paths between the components cited therein.

Regarding Claim 7, please refer to the above rejection of the similar limitations of Claim 3, noting the movement of the audio signals along the paths between components cited therein.

Regarding Claim 8, please refer to the above rejection of the similar limitations of Claim 2, noting the function of the components cited therein.

Regarding Claim 9, please refer to the above rejection of the similar limitations of Claim 5, noting the movement of the signals along the signal paths between the components cited therein.

> Regarding Claim 10, please refer to the above rejection of the similar limitations of Claims 1 and 5, noting the function and connections of the components and signals cited therein.
>
> Regarding Claim 11, please refer to the above rejection of the similar limitations of Claims 1, 3, and 5, noting the movement of the signals along the signal paths between the components cited therein. Pp.3-8.

These grounds of rejection are respectfully traversed. We rely on the authorities set forth on pages 2 and 3 of Response A transmitted November 26, 2002.

The Examiner relies on the secondary reference patent as disclosing the second passenger location, but fails to identify any disclosure in the references that suggests the desirability of combining what is disclosed in the references to meet the limitations of claim 1.

The contention that the motivation to combine is to provide additional passenger space is pure speculation and improperly using the claim being rejected as a blueprint in attempting to read claim limitations on prior art. The alleged teaching is found, not in the references but in the claims being rejected. It is error to reconstruct the claimed invention from the prior art by using the rejected claim as a "blueprint." *Interconnect Planning Corp. v. Feil*, 227 U.S.P.Q. 543, 548 (Fed. Cir. 1985).

> Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.[15] This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."[16] *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1784 (Fed. Cir. 1992).

The Examiner makes no contention that it is possible to combine the references to meet the limitations regarding which signals are transduced by which electroacoustical transducers. It is therefore impossible to combine the references to meet the limitations of the rejected claims.

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[15] *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

[16] *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1600.

"Moreover, we observe that even if these references were combined in the manner proposed by the examiner, that which is set forth in appellant's claims . . . would not result." *Ex parte Bogar*, slip op. p.7 (BPA&I Appeal No. 87-2462, October 27, 1989). "Even if we were to agree with the examiner that it would have been obvious to combine the reference teachings in the manner proposed, the resulting package still would not comprise zipper closure material that terminates short of the end of the one edge of the product containing area, as now claimed." *Ex parte Schwarz*, slip op. p.5 (BPA&I Appeal No. 92-2629 October 28, 1992). "Although we find nothing before us indicating why it would be desired to combine the references in the manner urged by the examiner, it is clear to us that such a modification by itself would not result in that which is set forth in the claims." *Ex Parte Kusko*, 215 U.S.P.Q. 972, 974 (BPA&I 1981). That it is impossible to combine the references to meet the limitations of the rejected claims is reason enough for withdrawing the rejection of them.

Regarding claim 5, the contention that the claimed third electroacoustical transducer that is behind the second passenger location reads on transducer 168 of the primary reference because transducer 170 could be on the parcel shelf is unsound. Transducer 170 is the right channel equivalent of left transducer 168, and both transducers have the same front/back location. Claims 2-5 are dependent upon and include all the limitations of claim 1, and the reasoning in support of the patentability of claim 1 supports the patentability of claims 2-5.

The reasoning set forth above in support of the patentability of claim 1 is submitted to support the patentability of claim 6. There is no disclosure in the references of transmitting a first of the plurality of directional audio channel signals and a surround audio channel signal to a first electroacoustical transducer situated behind the first passenger location, and transmitting the first directional audio channel signal to a second electroacoustical transducer situated forward of the first electroacoustical transducer, nor any suggestion of the desirability of combining what is there disclosed to meet the limitations of claim 6. Nor is it possible to combine what is disclosed in the primary and secondary references to meet the limitations of claim 6.

Claims 10 and 11 are pattered after claims 3 and 9 respectively, and are submitted to meet the conditions for patentability at least for the reasons advanced in support of claims 3 and 9.

Accordingly, withdrawal of the rejection of claims 1-11 as unpatentable over the primary and secondary references is respectfully requested. If these grounds of rejection are repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as corresponding to each limitation in each rejected claim and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the limitations of the rejected claims.

In view of the forgoing authorities, remarks and the inability of the prior art, alone or in combination, to anticipate or make obvious the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. Should the Examiner believe this application is not in a condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at 617-521-7014 to discuss what additional steps he believes are necessary to place the application in a condition for allowance.

Respectfully submitted,
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